

ALMEMO® 2020-1 Temperature Measuring Instrument Thermocouples NTC



Technical Features:

- ▶ Handy control measuring instrument with one measuring input.
- ▶ Easy-to-read 4½-digit LCD display.
- ▶ Measuring ranges for thermocouples (type K, L, J, U, T, S) and NTC.
- ▶ Extraordinarily easy handling as the sensor programming is stored within the intelligent ALMEMO® connector. The instrument automatically recognises the sensor and indicates the correct measured value in the display.
- ▶ Connectors that are ready for connection are available for customer-specific temperature sensors.
- ▶ Integrated test functions:
Segment control, range monitoring, sensor breakage indication, battery control.
- ▶ High measuring accuracy - with adjusted / calibrated ALMEMO® sensors (adjustment values are stored in the ALMEMO® connector).

Extent of the delivery (including manufacturer's test certificate)

Intelligent measuring instrument for thermocouples, NTC, including 9V alkaline-manganese battery

Order No. MA20201

Technical Data:

Measuring input:	1 socket for ALMEMO® sensor, 1 meas. chann.
Input impedance:	20MΩ
A/D converter:	Delta Sigma, 15 bit resolution
Measuring ranges:	
NiCr-Ni(K)	-200 ... +1370 °C
Fe-CuNi(L)	-200 ... +900 °C
Fe-CuNi(J)	-200 ... +950 °C
Cu-CuNi(U)	-200 ... +600 °C
Cu-CuNi(T)	-200 ... +400 °C
PtRh10-Pt(S)	0 ... 1760 °C
NTC	-50 ... +125 °C
Resolution:	up to 199,9°C: 0,1K up 200°C: 1K PtRh10 Pt(S): 1K
Linearisation Accuracy:	
Typ K, L, J, U, T	±0,05K ±0,05% of meas. value
Typ S	±0,3K
NTC	±0,05K
Conversion rate:	2.5 measurements/s
System accuracy:	±0.1% of meas. val. ±3 digits
Temperature drift:	0,01% / K
Cold junction compensation:	effective in range -30 ... +80°C (accuracy: ±0.2K ±0.01K/°C)
Check functions:	autom. sensor recognition, sensor breakage indication
Battery control:	battery voltage indication when sensor is disconnected or when channel is not used, LoBat signal at 7V, cutoff at 6.2V
Display:	LCD 7 segments 9mm measured values 3½ digits dimension 1 digit
Power supply:	9V alkaline-manganese battery (IEC6F22) or 9V rechargeable battery with charger unit integrated in connector
Current consumption:	approx. 3mA, operating time with battery is approx. 120h
Housing:	H150 x W60 x D26mm ABS high impact strength (70°C max.)

Accessories:

Sensors, see section 8	
Battery 9V (spare)	Order No. ZB2000B9
Connector charger unit with 9V battery	Order No. ZB2000LS
Transport case, medium (W320 D220 H60 inside)	Order No. ZB2280TK1
Transport case, small (W290 D200 H40 inside)	Order No. ZB2200TK1
Standby case	Order No. ZB2200BT

01/2007 We reserve the right to make technical changes.